



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/673,402

09/30/2003

Kiu-Hae Jung

1293.1861

3744

49455 7590 06/30/2008

STEIN, MCEWEN & BUI, LLP  
1400 EYE STREET, NW  
SUITE 300  
WASHINGTON, DC 20005

EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

06/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,402	<b>Applicant(s)</b> JUNG ET AL.	
	<b>Examiner</b> Aristotelis M. Psitos	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/29/08 & 6/9/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11,27-31,36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11,27-31,36 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Applicants' responses of 2/29/08 & 6/5/08 have been considered with the following results.

#### ***Drawings***

The drawings filed 2/29/08 have been approved and are entered. However, since replacement sheet for figure 3 filed on 10/12/07 has been approved, the figure 3 submitted with the above sheets (of 2/29/08) now needs to be re-corrected.

#### ***Information Disclosure Statement***

The submitted IDS documents have been reviewed and made of record.

#### **Errata**

As recited, the independent claims call for a user data area and an additional data area, wherein the additional data area has a 2<sup>nd</sup> sync signal which then comprises of a 3<sup>rd</sup> and 4<sup>th</sup> sync signal.

Reviewing the disclosure and figure 2, the additional data area is defined as area 2, where in the 2nd sync area (23) comprises of a second and third sync component 23a, 23b. The examiner makes the following conclusions;

The additional data area comprises of a plurality of data areas, and in order to have a 3rd and 4th sync there must be at least two additional data areas.

The following art rejections are predicated upon the above interpretation.

#### ***.Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2627

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1,2 and 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isozaki et al ('142) considered with JP 04-113563 and both further considered with Olmedo and all further considered with Tanaka et al and Hedlund et al.

The following analysis is made.

Isozaki et al discloses the ability of providing both video and audio information upon a record medium. The examiner interprets the video data as the claimed user data, and the audio data as the additional data area. Note that both the video and audio data areas can in themselves comprise of a plurality of areas.

As noted starting in col. 8 line 25 to col. 10 line 53, different syncs are required for the video and audio data.

As further noted by JP 04-113563, the audio and video data have different sync patterns in order to distinguish there between.

Furthermore, as additional taught by the Olmedo reference, text data can also be provided in this environment (along with audio).

It would have been obvious to modify the base system Isozaki et al to further modify such with the additional teaching from Olmedo to have additional data – i.e., auxiliary data – specifically text data.

Art Unit: 2627

Furthermore, this sync patterns for the text data and audio data are different from one another - see col. 3 starting at line 60.

Motivation would be to provide for a plurality of different additional data areas, in addition to the video data area - i.e., audio and text, each having their own unique (different pattern) sync signal in order to be distinguished between in each other.

Furthermore, the use of additional identification codes (synch identification) is additionally taught by Tanaka et al – see the discussion with respect to figure 4 for instance.

It would have been obvious to modify the above combined system with the additional teachings from Hirayama et al to further include sync identification codes - for their inherent use as taught by Tanaka et al and further to include additional "type" codes to further identify the type of the information - i.e., text, audio, still, etc and as further taught by Hedlund et al - see the discussion wrt figure 2 and the "type" code teaching.

This would provide for the ability of a record medium to have a plurality of data present with its own unique sync pattern/identification and hence allowing for the proper display/playback of such information.

With respect to claim 2, since there is a plurality of video data areas, the examiner interprets claim 2 to require at least two video sector(s)/frames.

With respect to claim 27, the apparatus elements are present in the above combined references.

With respect to claim 29, obviously transfer of the appropriate data areas occurs.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

The examiner has taken into consideration the emphasis (during the interview) with respect to the claimed phrases "user data" and "additional data". However, there is no prohibition from the claims to not limit the "user data" to the above identified video data. Furthermore, there is nothing to prohibit the interpretation of "user" data area as merely that of 1 field/frame of video data. And hence any data areas subsequent to such data area(s) are "additional data area(s)".

Art Unit: 2627

2. Claims 8,11 and 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2, and 27 as stated in paragraph 1 above, and further in view of either Ho et al or Roth et al ('335).

Either Ho et al or Roth teach in this environment, the ability of rll encoding techniques for the sync patterns. Ho et al - see for instance the disclosure starting at Col. 1 line 39 and continuing till col. 3 line 20.

The Roth reference is relied upon for teaching rll encoding, with various run lengths, i.e., different bodies. Furthermore, the Roth et al reference also discusses rll, with similar and dissimilar constraints, see for instance the discussion starting at col. 3 line 65 and continuing till at least col. 4 line 67.

It would have been obvious to modify the base system as relied upon above in paragraph 1 with the above rll teaching from either Ho et al or Roth et al, motivation is to use the appropriate rll encoding technique in order to maximize the data density as required.

#### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

3. Claims 3,5,6,9,10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2, and 27 as stated in paragraph 1 above, and further in view of Koshino et al.

Although the size of the audio and text data areas in Olmedo are equal, there is no clear depiction of such in the above references.

Nevertheless, the ability of providing for equal size audio and video data areas is further taught by the Koshino et al reference – see for instance col 4 starting at line 1.

It would have been obvious to modify the base systems as relied upon above and further provide for equal size data areas between all the recording data areas – motivation is as taught by Koshino et al.

#### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2627

4. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 11 and 31 as stated in paragraph 2 above, and further in view of either Ho et al or Roth et al ('335).

Either Ho et al or Roth teach in this environment, the ability of rll encoding techniques for the sync patterns. Ho et al - see for instance the disclosure starting at Col. 1 line 39 an continuing till col. 3 line 20.

The Roth reference is relied upon for teaching rll encoding, with various run lengths, i.e., different bodies. Furthermore, the Roth et al reference also discusses rll, with similar and dissimilar constraints, see for instance the discussion starting at col. 3 line 65 and continuing till at least col. 4 line 67.

It would have been obvious to modify the base system as relied upon above in paragraph 1 with the above rll teaching from either Ho et al or Roth et al, motivation is to use the appropriate rll encoding technique in order to maximize the data density as required.

#### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 3 and 6 as stated in paragraph 3 above, and further in view of either Ho et al or Roth et al ('335).

Either Ho et al or Roth teach in this environment, the ability of rll encoding techniques for the sync patterns. Ho et al - see for instance the disclosure starting at Col. 1 line 39 an continuing till col. 3 line 20.

The Roth reference is relied upon for teaching rll encoding, with various run lengths, i.e., different bodies. Furthermore, the Roth et al reference also discusses rll, with similar and dissimilar constraints, see for instance the discussion starting at col. 3 line 65 and continuing till at least col. 4 line 67.

It would have been obvious to modify the base system as relied upon above in paragraph 1 with the above rll teaching from either Ho et al or Roth et al, motivation is to use the appropriate rll encoding technique in order to maximize the data density as required.

Art Unit: 2627

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's attention is further drawn to the following additional cited references:

JP 2002-304821 – see the abstract as well as figures 3 & 4 as far as the examiner can ascertain, there is a plurality of data areas, and in addition thereto there are additional “correction” blocks. The correction blocks can be interpreted as meeting the limitation with respect to the phrase “additional data area”. Hence the abstract continues to define different sync codes (SY0), (SY1), in addition to the normal sync code (SY). All of these sync codes are distinguishable from each other. Hence, the claims could be rejected relying upon this document as providing the secondary teaching(s) wrt additional data area and the differing sync patterns for such.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thur: 6:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Application/Control Number: 10/673,402

Page 8

Art Unit: 2627

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2627

/Aristotelis M Psitos/  
Primary Examiner, Art Unit 2627